

| APPLICABLE STANDARD | | | | |
|--|---|--|---------------------------|--|
| RATING | OPERATING TEMPERATURE RANGE | -55 °C TO 85 °C ⁽¹⁾ | STORAGE TEMPERATURE RANGE | -10 °C TO 60 °C ⁽²⁾ |
| | VOLTAGE | 100 V AC | STORAGE HUMIDITY RANGE | 40 % TO 70 % ⁽²⁾ |
| | CURRENT | 0.5 A (SIGNAL CONTACT) ⁽³⁾ 3 A (MF CONTACT) | OPERATING HUMIDITY RANGE | RELATIVE HUMIDITY 85% max (NOT DEWED) |
| SPECIFICATIONS | | | | |
| ITEM | TEST METHOD | REQUIREMENTS | QT | AT |
| CONSTRUCTION | | | | |
| GENERAL EXAMINATION | VISUALLY AND BY MEASURING INSTRUMENT. | ACCORDING TO DRAWING. | x | x |
| MARKING | CONFIRMED VISUALLY. | | x | x |
| ELECTRIC CHARACTERISTICS | | | | |
| CONTACT RESISTANCE | 100 mA(DC OR 1000Hz) | SIGNAL CONTACT : 90 mΩ MAX. MF CONTACT : 30 mΩ MAX. | x | - |
| INSULATION RESISTANCE | 250 V DC. | 1000 MΩ MIN. | x | - |
| VOLTAGE PROOF | 300 V AC FOR 1 min. | NO FLASHOVER OR BREAKDOWN. | x | - |
| MECHANICAL CHARACTERISTICS | | | | |
| INSERTION AND WITHDRAWAL FORCES | MEASURED BY APPLICABLE CONNECTOR. | INSERTION FORCE: 70 N MAX. WITHDRAWAL FORCE: 7 N MIN. | x | - |
| MECHANICAL OPERATION | 500 TIMES INSERTIONS AND EXTRACTIONS. | ① CONTACT RESISTANCE: SIGNAL CONTACT : 100 mΩ MAX. MF CONTACT : 40 mΩ MAX. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - |
| VIBRATION | FREQUENCY 10 TO 55 TO 10Hz, APPROX 5min SINGLE AMPLITUDE : 0.75 mm, 10 CYCLES FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - |
| SHOCK | 490 m/s ² , DURATION OF PULSE 11 ms AT 3 TIMES FOR 3 DIRECTIONS. | ① NO ELECTRICAL DISCONTINUITY OF 1 μs. ② NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - |
| ENVIRONMENTAL CHARACTERISTICS | | | | |
| DAMP HEAT (STEADY STATE) | EXPOSED AT 40±2 °C, 90 ~ 95 %, 96 h. | ① CONTACT RESISTANCE: SIGNAL CONTACT : 100 mΩ MAX. MF CONTACT : 40 mΩ MAX. | x | - |
| RAPID CHANGE OF TEMPERATURE | TEMPERATURE -55 → +85 °C TIME 30 → 30 min. UNDER 5 CYCLES. (RELOCATION TIME TO CHAMBER: WITHIN 2~3 MIN) | ② INSULATION RESISTANCE :1000 MΩ MIN. ③ NO DAMAGE, CRACK AND LOOSENESS OF PARTS. | x | - |
| SULFUR DIOXIDE | EXPOSED AT 25±2°C, 75±5%RH, 25 PPM FOR 96 h. (TEST STANDARD: JIS C 60068) | NO HEAVY CORROSION. | x | - |
| RESISTANCE TO SOLDERING HEAT | 1)REFLOW SOLDERING : PEAK TMP : 260°C MAX REFLOW TMP: 220°C MIN FOR 60sec 2) SOLDERING IRONS : 360°C MAX. FOR 5 sec. | NO DEFORMATION OF CASE OF EXCESSIVE LOOSENESS OF THE TERMINAL. | x | - |
| SOLDERABILITY | SOLDERED AT SOLDER TEMPERATURE 240±3°C FOR IMMERSION DURATION, 3 sec. | A NEW UNIFORM COATING OF SOLDER SHALL COVER A MINIMUM OF 95 % OF THE SURFACE BEING IMMERSED. | x | - |
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| COUNT | DESCRIPTION OF REVISIONS | DESIGNED | CHECKED | DATE |
| | 4 DIS-F-004173 | TH. SAN0 | KI. HIROKAWA | 09.09.15 |
| REMARKS ⁽¹⁾ INCLUDE TEMPERATURE RISE CAUSED BY CURRENT-CARRYING. ⁽²⁾ "STORAGE" MEANS A LONG-TERM STORAGE STATE FOR THE UNUSED PRODUCT BEFORE ASSEMBLY TO PCB. ⁽³⁾ THE RATED CURRENT APPLIES TO PER CONTACT. APPLY 0.4A WHEN ALL THE CONTACTS ARE USED FOR CURRENT CARRYING. Unless otherwise specified, refer to JIS-C-5402. | | APPROVED | HS. OKAWA | 09.04.28 |
| | | CHECKED | HS. OZAWA | 09.04.28 |
| | | DESIGNED | KI. HIROKAWA | 09.04.28 |
| | | DRAWN | KI. HIROKAWA | 09.04.28 |
| Note QT:Qualification Test AT:Assurance Test X:Applicable Test | | DRAWING NO. | ELC4-159085-00 | |
| | SPECIFICATION SHEET | PART NO. | FX18-120S-0.8SH | |
| | HIROSE ELECTRIC CO., LTD. | CODE NO. | CL579-0013-1-00 | 1/1 |